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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,251	01/11/2002	C. Richard Panico	99148.165	2287
23483	7590	08/13/2004	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			HARAN, JOHN T	
			ART UNIT	PAPER NUMBER

1733

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/055,251	<b>Applicant(s)</b> PANICO ET AL.	
	<b>Examiner</b> John T. Haran	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 15, 17 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 15, 17 and 21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/6/04</u> . | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This office action is in response to the amendment to the claims and remarks filed on 7/12/04.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 7/6/04 has been considered by the examiner.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added limitation to claim 11 that "the lamp system has first and second lamps, each having at least one circular turn, each lying in a different plane" is considered new matter. The only possible support for having more than one lamp is located on page 3 of the specification, lines 6-7 of the second paragraph, which states "In addition, it would be possible to have concentric rings that do not form a single monolithic lamp unit". Also relevant is the description of Figure 4, located on page 4 of the specification, which states "Referring to Fig. 4, a lamp can have a first ring and a

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second ring (and possibly additional rings) that lie in different planes in a direction parallel to a workpiece. The rings can be spaced apart and energized separately, or they can be connected like a spiral in a manner as shown in Figs. 1 and 2." The specification does not provide adequate description indicating what is meant by the term "a single monolithic lamp unit", however in conjunction with the description of Figure 4 in the specification it appears there is only one lamp and the one lamp can have independent rings, which are spaced apart and energized separately. It appears that the spaced apart and separately energized rings are part of one lamp but are not a single monolithic lamp unit. Accordingly there does not appear to be support in the disclosure, as originally filed, for having more than one lamp. One skilled in the art, reading the disclosure at the time the application was filed, would not have understood Applicant to have had possession of a lamp system with first and second lamps.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11, 15, 17, 24, 25, and 27-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitation "the lamp system". There is insufficient antecedent basis for this limitation in the claim.

Claim 15 is indefinite because it is unclear if the first and second rings are part of the same pulsed lamp or different lamps. As noted above in the new matter rejection of

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claim 11, there is no support in the disclosure for having two lamps. Accordingly the claim should be amended to say - - the pulsed lamp includes a first ring and a second ring - -. In addition the term "a single lamp enclosure" is indefinite because it is entirely unclear what is meant by this term. It is suggested to delete "and not part of a single lamp enclosure" from the claim.

Claim 17 is indefinite because it requires one of the rings to be closer to the DVD than the other and it appears this would only be possible if the rings are in different planes, however claim 15 states the rings are concentric. Concentric rings have the same center and are in the same plane so it is unclear how the rings can be both concentric and in different planes so that one ring is closer to the DVD than the other.

Claim 24 is indefinite because DVDs and CDs are two entirely different devices and CDs are not a subset of DVDs. It is suggested to amend the claim to read - - The system of claim 22, wherein the workpiece is a compact disk (CD). - -.

Claim 25 is indefinite for the same reason as claim 24.

Claim 27 recites the limitation "the first and second rings". There is insufficient antecedent basis for this limitation in the claim.

Claims 28-30 are indefinite because they require the reflector to be contoured to apply uniform energy to the surface of the DVD, yet they depend from claims that require the reflector to be contoured to direct more light to the periphery of the DVD than the center of the DVD. It is unclear how the reflector can be contoured to do both.

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Claim 29 is also indefinite because claim 12 already has a reflector and it is unclear if the reflector referred to in claim 29 is the same reflector mentioned in claim 12 or a different reflector.

Claim 30 recites the limitation "the DVD". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-10, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040).

Yamada discloses a system comprising an optical disk (DVD) lying in a first plane and a pulsed lamp for directing pulsed light to the optical disk for processing the optical disk during manufacture wherein the lamp having a plurality of straight lamps or a lamp having a spiral shape (Column 17, lines 55-65).

Yamada is silent towards whether or not the spiral lamp is a flat spiral lamp and lies in a second plane parallel to the first plane, however such it is well known and conventional for spiral lamps to be flat and be in a plane parallel to the plane of a workpiece, as shown for example in Panico (See Figure 3). One skilled in the art would

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have readily appreciated using a flat spiral lamp as is conventional as suggested in Panico. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a flat spiral lamp that lies in a second plane parallel to the first plane in the system of Yamada, as suggested in Panico.

Regarding claim 2, spiral lamps generally have at least two turns as shown for example in Panico (See Figure 3) and it would have been obvious to use such in the system of Yamada, as modified above.

Regarding claims 3 and 4, Yamada teaches having a reflector (Column 13, lines 40-42), but is silent towards it being contoured to provide less light to the center and more to the periphery of the DVD. One skilled in the art would have readily appreciated that it is well within the skill of the ordinary artisan to have such a contoured reflector if desired and it would have been obvious to provide such in the system of Yamada since DVDs have a hole at the center and there is no need to waste excess energy applying the pulsed light to an area that does not need to be exposed to the pulsed light.

Regarding claims 5-10, one skilled in the art would have readily appreciated having the lamp being smaller or larger than the DVD and having the reflector appropriately contoured to ensure uniform surface exposure to the pulsed light. It would have been obvious for the lamp to have a larger or smaller diameter than the DVD in the system of Yamada, as modified above.

Regarding claim 25, one skilled in the art would have readily appreciated that CDs are also optical discs.

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Regarding claim 28, Yamada teaches having a reflector and applying uniform energy to the surface of the optical disc (DVD).

9. Claims 12, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panico (U.S. Patent 4,495,040) in view of Buazza (U.S. Patent 5,928,575).

Panico discloses a discharge flash lamp the discharges pulses of uv light wherein the lamp is configured in a flat spiral with multiple turns (See Column 1, lines 25-55; Figures 3, 8, 9, and 11). It is noted that the DVD is the material worked upon and is not considered part of the system and that the lamp is capable of directing light to a DVD.

Panico teaches having a contoured reflector (14) for reflecting light from the lamp to the material worked upon (Column 3, lines 8-12), but is silent towards it being contoured to provide less light to the center of a workpiece, such as a DVD and more light to the periphery. One skilled in the art would have readily appreciated that the lamp of Panico would could apply pulsed light to a DVD and that it is well within the skill of the ordinary artisan to have such a contoured reflector if desired and it would have been obvious to provide such in the system of Yamada since DVDs have a hole at the center and there is no need to waste excess energy applying the pulsed light to an area that does not need to exposed to the pulsed light. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the reflector to be



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contoured to provide less light to the center and more to the periphery in the system of Panico.

Panico is also silent towards there being first and second rings in different planes that are parallel. Buazza teaches that flash lamps can be arranged in a plurality of shapes, including ring, helix, U, and linear and that the shapes are interchangeable (Column 44, lines 14-15). One skilled in the art would have readily appreciated using any of the known shapes for a flash lamp including a helix, which has a plurality of rings in different planes that are parallel in the lamp of Panico. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lamp with a helix shape that has first and second rings in different planes that are parallel in the lamp on Panico as is known in the art as suggested in Buazza.

Regarding claim 26, one skilled in the art would have readily appreciated that a helix lamp is an extended flat spiral lamp and that the rings would have different radii.

Regarding claim 29, one skilled in the art would have readily appreciated that the reflector would be contoured to provide uniform energy to the entire surface of a DVD.

10. Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al (U.S. Patent 5,684,778) in view of Panico (U.S. Patent 4,495,040) as applied to claims 1-10, 25, and 28 above, and further in view of Buazza (U.S. Patent 5,928,575).

Yamada is silent towards there being first and second rings in different planes that are parallel. Buazza teaches that flash lamps can be arranged in a plurality of

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shapes, including ring, helix, U, and linear and that the shapes are interchangeable (Column 44, lines 14-15). One skilled in the art would have readily appreciated using any of the known shapes for a flash lamp including a helix, which has a plurality of rings in different planes that are parallel in the lamp of Yamada. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the lamp with a helix shape that has first and second rings in different planes that are parallel in the lamp on Yamada as is known in the art as suggested in Buazza.

Regarding claim 27, one skilled in the art would have readily appreciated that a helix lamp is an extended flat spiral lamp and that the rings would have different radii.

11. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal (U.S. Patent 6,030,653) in view of Panico (U.S. Patent 4,495,040).

Rosenthal is directed to a system comprising a pulsed lamp for positioning over a workpiece, the lamp having a spiral configuration about a central axis and extending from an inner radius spaced from the central axis to an outer axis and having at least one turn in a first plane perpendicular to the central axis wherein the inner radius and outer radius are spaced from the central axis so relatively less energy is provided to the workpiece along the central axis and relatively more energy is provide to portions of the workpiece between the inner and outer radius (See Figure 1 and Column 6, lines 4-17).

Rosenthal also teaches an anode and cathode connection extending from the lamp to a power supply, one from the inner radius and the other from the outer radius (See Figure 1 and Column 6, lines 19-24), but is silent towards the connection

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extending in a direction perpendicular to the first plane, however such is a well known and conventional configuration, as shown for example in Panico (See Figure 11). One skilled in the art would have readily appreciated that the configuration of the connection is within the purview of one skilled in the art and that there does not appear to be any criticality to the configuration. It would have been obvious to have the connections be perpendicular to the first plane in the system of Rosenthal, as is conventional as suggested in Panico.

Regarding claim 22, Rosenthal teaches a workpiece, such as a food product (see Abstract).

12. Claims 23, 24, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenthal (U.S. Patent 6,030,653) in view of Panico (U.S. Patent 4,495,040) as applied to claims 21 and 22 above, and further in view of Yamada et al (U.S. Patent 5,684,778).

Regarding claims 23 and 24, Rosenthal is silent towards the workpiece being a DVD or CD. Yamada et al teaches using a pulsed spiral lamp to apply light to the surface of an optical disk (DVD or CD) (Column 17, lines 55-65). One skilled in the art would have readily appreciated placing known workpieces under the pulsed lamp of Rosenthal. It would have been obvious for the workpiece to be a DVD or CD in the system of Rosenthal, as suggested in Yamada et al.

Regarding claim 30, Rosenthal is silent towards having a reflector, however Yamada teaches having a reflector (Column 13, lines 40-42) and it would have been

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obvious to use one in the system of Rosenthal in order to ensure uniform energy exposure to the entire surface of the DVD.

***Allowable Subject Matter***

13. The present application appears to have allowable subject matter that is not presently claimed. Lines 1-4 of page 4 of the specification states that the lamp can have a first ring and a second ring that lie in different planes in a direction parallel to the workpiece and that the rings are spaced apart and energized separately. The prior art of record fails to suggest such a limitation. It is suggested to amend claims 1 and 12 to have such a limitation.

***Response to Arguments***

14. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

It is noted that claim 12 was previously rejected as being obvious under 103(a) over Panico in view of Buazza (See Paragraph 10 of the previous office action).

***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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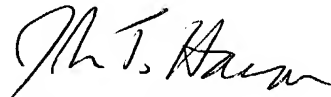
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(571) 272-1217**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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John T. Haran  
Examiner  
Art Unit 1733